

U.S. Patent application Serial No. 10/542,971
Reply to Office Action dated July 29, 2008

Remarks:

Applicants have read and considered the Office Action dated July 29, 2008 and the references cited therein. Claims 1, 5, 8 and 12 have been amended. New claim 15 has been added. Claims 1 and 3-15 are currently pending. Reconsideration is hereby requested.

In the Action, claim 5 was objected to for lacking a period at the end. The period has been added at the end of the claim and Applicants assert that the objection to the claim has been overcome and should be withdrawn.

Claims 1, 3, 4, 7 and 8 were rejected under 35 U.S.C. § 102(b) as being anticipated by Ometz et al. The Action stated that Ometz discloses a method for inspecting packaging for a liquid product including setting a packaging into rotation, irradiating the packaging during the rotations with radiation of a predetermined wave length. The Action stated that Ometz also discloses making at least one series of at least two recordings of at least a part of the contents of the packaging during rotation, with an image recording device suitable for making recordings at the predetermined wavelength. Finally, the Action stated that Ometz discloses that the packaging is situated in substantially the same rotational position relative to the recording device during successive recordings of the series. Applicants respectfully traverse the rejection.

Claim 1 has been amended and now recites that the packaging is maintained in rotation during the successive recordings of the series. Claim 1 clarifies that the recording takes place while the packaging is rotating. Applicants assert that careful review of Ometz shows that the images are taken after the containers are stopped. In the paragraph beginning at column 8, line 20, Ometz clearly states that the bottle is stopped by a mechanical device. It can be seen that Ometz scans point by point rather than continuing rotation as now clearly recited in claim 1. Accelerating and stopping the bottle in Ometz takes additional time and slows the inspection

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process. With the method of the present application, a fewer number of inspectors can inspect a higher number of bottles without adversely affecting the quality of the inspections. Applicants assert that Ometz does not teach or suggest irradiation and imaging of the containers during rotation. Applicants assert that Ometz does not teach or even suggest making a series of images at the same relative position of the bottles while rotating. As Ometz clearly states that the bottles are stopped, Ometz teaches away from the method recited in claim 1.

Moreover, claims 1 and 6 were rejected under 35 U.S.C. § 102(b) as being anticipated by Manique et al. Again, Manique does not teach or suggest imaging of the packaging as rotated. Conversely, Manique has stationary images as recited in claim 4, lines 23-28. This teaches away from the method recited in claim 1, relating to dynamic imaging of the rotating packaging. Moreover, Applicants assert that although the Office Action stated that Manique teaches images are taken at the same rotational position, Applicants assert that this is not necessarily taught by Manique. Manique only teaches that at least once every revolution a scan is made. However, this is not the same as indicating that it is in the same position. Moreover, Manique only provides for line scans that do not provide a reference image of the entire surface and does not provide for the same comparison as provided for by the method recited in claim 1. Applicants assert that Manique does not teach or suggest the method now recited in claim 1. Applicants assert that claim 1 patentably distinguishes over Manique and that claim 6 is also allowable for at least the same reasons.

Moreover, claim 3, rejected over Ometz, recites that the successive recordings are made with an intervening time interval of a predetermined duration. As discussed above with regard to claim 1, Ometz teaches that the bottles are stopped. However with claim 3, the intervening time interval must have a pre-determined duration so that the recording can take place at the same rotational position without stopping. Applicants assert that claim 3 further clarifies over Ometz.

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With regard to claim 4, the Office Action indicated that Ometz discloses the rotational speed as varied during the period in which recordings of the series are made and cites column 10, lines 5-12. Applicants believe that a careful reading of Ometz shows that this is not an accurate characterization. Ometz stops the bottle so that the contents of the bottle will slow down due to friction and that the imaging and processing adjusts for that. Applicants assert however that this is different than varying the speed of the container during imaging. Applicants assert that claim 4 patentably distinguishes over Ometz and any other prior art.

Moreover, claim 8 recites that the signal applied from outside the camera is from a rotation generating device. This ensures proper timing for the imaging. This is a different approach and a different method from that disclosed in Ometz and/or any other cited prior art or combination thereof. Applicants assert that this would not be obvious to one of ordinary skill in the art at the time the invention was made. Applicants therefore assert that claim 8 is also allowable.

Claim 5 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Ometz et al. in view of Ishikawa. Ishikawa teaches rotating the container in a first direction during a first period and an opposite direction during a second period and stopping the liquid within the container and then taking an image. Applicants therefore assert that no image is taken of the container during rotation. Ishikawa therefore suffers from the same problems related to additional time for starting and stopping the container as discussed above with regard to Ometz. Applicants therefore assert that claim 1 also patentably distinguishes over the combination of Ometz and Ishikawa and that claim 5 is also allowable for at least the same reasons as well as others.

Claims 9 and 11 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Ometz et al. in view of Katane et al. Katane relates to imaging from different predetermined angles and not of imaging taken at the same position. Therefore, the comparison of the bottle in

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the same position cannot be determined as is possible with the method recited in the claims of the present application. Applicants therefore assert that claim 1 patentably distinguishes over the combination of Ometz and Katane and any other prior art. Moreover, claims 9 and 11 are also allowable for at least the same reasons as well as others.

Claims 12-14 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Ometz in view of Cronshaw et al. Claim 12 has been amended to recite the range of angles that may be used. Cronshaw teaches only that the angle of the imaging device is approximately 135 degrees. Therefore, Applicants assert that a range between 90 degrees and 180 degrees has not been disclosed and is not obvious in view of Cronshaw. Moreover, Cronshaw again teaches imaging only when the bottle is stationary. See column 3, lines 1-30 of Cronshaw. Applicants therefore assert that the combination of Ometz and Cronshaw does not teach or suggest the method recited in claim 12.

Claim 15 provides further clarification that the bottle remains spinning during the imaging process and is believed to be allowable as discussed above.

A speedy and favorable action in the form of a Notice of Allowance is hereby solicited. If the Examiner feels that a telephone interview may be helpful in this matter, please contact Applicant's representative at (612) 336-4728.

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Please consider this a PETITION FOR EXTENSION OF TIME for a sufficient number of months to enter these papers or any future reply, if appropriate. Please charge any additional fees or credit overpayment to Deposit Account No. 13-2725.



Respectfully submitted,

MERCHANT & GOULD P.C.

Dated: _____

1/29/09

By: _____

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